

REMARKS/ARGUMENTS

I. Introduction:

Claims 31-41 have been withdrawn from consideration by the Examiner as being directed to a non-elected distinct invention. Claim 1-16, 18, 27-30, and 51-53 have previously been canceled. Claims 17, 19-26, 42-50, and 54-56 are currently pending.

II. Claim Rejections Under 35 U.S.C. §103:

Claims 17, 19-25, 42-49, and 54-56 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,190,666 (Bisconte) in view of U.S. Patent No. 6,190,619 (Kilcoin et al.)

Bisconte discloses an apparatus for filtering a plurality of fluid samples containing particles such as bacteria. The apparatus may be used, for example, in analyses performed in the food industry (e.g., milk, beer, mineral water, fruit juice) in which the presence of bacteria must be monitored. As shown in Fig. 2, the apparatus includes two filters 2a, 2b and a gasket 3 interposed therebetween. The gasket includes a plurality of perforations 4. The filters are pressed in a sealed manner against the gasket 3 by two clamping blocks 5a and 5b. The clamping blocks each include a perforated disk 7a, 7b having perforations in alignment with the perforations in the gasket. Clamping block 5a includes a perforated plate 13a. Air under pressure is injected into chamber 27 via orifice 28 provided through enclosure 8a of clamping block 5a. Plate 13a includes an opening for passing air under pressure into chamber 27 so that samples are delivered to the filters 2a, 2b via dip tubes 21, pipes 12a, and gasket

3. Clamping of the block 5a and tray 20 creates the sealed chamber 27 between the perforated plate 13a, block 5a, and the storage wells 19.

As noted by the Examiner, Bisconte does not teach a flow restriction device having a plurality of passageways configured to provide fluid communication with each of the wells while reducing cross talk between the wells, as set forth in independent claims 17, 19, 20, 22, 42, 44, 47, 48, and 56.

Kilcoin et al. disclose an apparatus for parallel synthesis of compounds. The apparatus comprises a frame 12 having a plurality of reaction vessels 16, and a lid 20 movable between an open position and a closed position which provides a gas-tight seal for the reaction vessels. The lid includes a fluid manifold 38. As shown in Fig. 3, the manifold includes passages 42, 44 aligned with holes 40 in lid 20. A cap vent 54 is rotatably mounted between each of the reaction vessels and the fluid manifold and includes openings for aligning with fluid passages 42, 44. The cap vent includes a hub 68 for insertion into opening 66 of vessel 16. The hub is configured to generate a radial gas seal with opening 66 of the vessel. In some embodiments, the manifold includes elastomeric layers 96 which provide resilience to maintain a seal with the cap vent 54.

The apparatus of Kilcoin et al. provides individually sealable reaction vessels. There is no common pressure chamber in communication with a plurality of reaction wells. Furthermore, Kilcoin et al. do not show or suggest a flow restriction device configured to provide a direct fluid communication path between one of the reaction vessels and a common pressure chamber while reducing cross-talk between the reaction vessels. Since there is no common pressure chamber shared between the vessels, there is no path between the vessels and a common pressure chamber. Since the vessels are individually sealed, there is no cross-talk between reaction vessels, and therefore, no need to reduce cross-talk between vessels.

The Examiner states that "one would add the manifold system of Kilcoin in order to individually pressurize and control the fluid flow in each well instead of simply pressurizing all the wells at once as currently done by Bisconte (col. 5, lines 46-61)."

Applicants respectfully submit that there is no suggestion to combine the teachings of Kilcoin et al. with Bisconte to produce the claimed invention. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. As discussed above, Bisconte is concerned with filtering a plurality of samples through a filter and uses a plurality of vessels exposed to a common pressure chamber. The chamber is pressured by compressed air in the range of 1 bar to 7 bars (15-102 psig), or higher (col. 8, lines 11-16). In contrast, the apparatus of Kilcoin et al. is used for synthesizing chemical compounds using a plurality of individually sealable reaction vessels. When pressures in the reaction vessel exceed about 18-20 psi, pressure is released for the individual reaction vessel. As noted at col. 7, lines 15-17, excess pressure can be vented from a single reaction vessel without interfering with the seal and synthesis reactions occurring in adjacent reaction vessels. Hence, absent improper hindsight, there is no motivation existing in the art for combining the teaching of these references.

Even assuming, for the sake of discussion, that one would look to Kilcoin et al. for a way to modify the apparatus of Bisconte, as suggested by the Examiner, this would not necessarily lead to Applicants' invention. In particular, the invention defined by claim 17 requires a common pressure chamber in communication with a plurality of reaction wells and a flow restriction device configured to provide direct fluid communication between reaction wells and the pressure chamber while reducing cross-talk between the reaction wells. Therefore, adding the manifold system of Kilcoin et al. in order to individually pressurize and control fluid flow in each well of Bisconte would not lead a person of ordinary skill in the art to the invention of claim 17.

Accordingly, claims 17, 19, 20, 22, 42, 44, 47, 48, 54, and 56 are submitted as patentable over Bisconte and Kilcoin et al.

Claim 54 is further submitted as patentable over the cited references which do not show or suggest a plurality of flow passageways providing the only fluid communication path between a plurality of reaction wells and a common pressure chamber. As discussed above, there is open fluid communication between all of the wells and the chamber in the space below plate 13a.

Claims 21, 23, 24, 25, and 55 depending from claim 17, and claims 43, 45, 46, and 49, depending from claim 42 are also submitted as patentable for the reasons discussed above with respect to claims 17 and 42.

Claims 26 and 50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bisconte and Kilcoin et al., and further in view of U.S. Patent No. 6,045,755 (Lebl et al.).

The Lebl et al. patent does not remedy the deficiencies discussed above with regard to the Bisconte and Kilcoin et al. references. Furthermore, Lebl et al. do not show or suggest a plurality of springs disposed at the bottom of reaction wells for biasing vials upward against a flow restriction device. As shown in Fig. 6B, Lebl et al. use an array of sealing balls designed to mate with apertures of the reaction vessels. Since the balls individually seal each reaction vessel, the vessels are not in communication with a common pressure chamber. Applicants' invention provides springs at the bottom of the reaction wells so that the upper ends of the reaction wells are in fluid communication with the common pressure chamber.

Accordingly, claims 26 and 50 are submitted as patentable over the prior art of record.

III. Conclusion:

In view of the foregoing, claims 17, 19-26, 42-50, and 54-56 are submitted as patentable over the prior art of record. Accordingly, favorable reconsideration and allowance of this application is requested. If the Examiner feels that a telephone conference would in any way expedite prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Respectfully submitted,



Cindy S. Kaplan
Reg. No. 40,043

P.O. Box 2448
Saratoga, CA 95070
Tel: 408-399-5608
Fax: 408-399-5609